ALLTEL CORPORATION

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EX PARTE OR LATE FILED

February 28, 2001

Via Hand Delivery

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Ms. Magalie Roman Salas Secretary Federal Communications Commission 445 12th Street, SW, Room TW-A325 Washington, D.C. 20554 RECEIVED

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PERSONAL COMMUNICATIONS COMMISSION MITTER OF THE SECRETARY

Re:

ALLTEL Corporation, et.al. (the "Coalition")¹

Written Ex Parte Presentation Gulf of Mexico Cellular CC Docket No. 90-6 WT Docket No. 97-112

Dear Ms. Salas:

On behalf of the Coalition, we transmit herewith for inclusion in the record two copies of a written Ex Parte presentation directed to the staff of the Wireless Telecommunications Bureau with respect to the above-referenced proceeding. Specifically, the written presentation is being served on Mr. David Furth, Esq. and Ms. Lauren Kravitz, Esq.

Please direct any questions respecting this filing to the undersigned.

Assistant Vice President
Federal Regulatory Affairs
ALLTEL Corporation

Cc: David Furth, Esq., Room 4-B522 Lauren Kravitz, Esq., Room 4-A163

¹ The Coalition of land-based carriers supporting this filing is composed of ALLTEL Corporation, AT&T Wireless Services, Inc., MobileTel, Inc., Telepak, Inc. and Texas RSA 20 B2 Limited Partnership. Verizon (formerly GTE and Bell Altantic) and Cingular (formerly Bell South and SW Bell Wireless) have expressed support for previous Coalition filings (including the Joint Proposal) are expected to support this submission through independent filings.

Summary Coalition¹ Ex Parte Gulf of Mexico February 28, 2001 WT Docket No. 97-112 CC Docket No. 90-6

I. Introduction and Statement of the Conflict.

As the Commission acknowledged in the rulemaking and elsewhere,² there has been a continuing conflict in the Gulf between land-based and Gulf-based licensees. The conflict arises due to the disparate technical and economic environments in which land-based and Gulf based systems operate. The "troubles" in the Gulf can only be solved through adoption of rules that permit land-based carriers and Gulf-based carriers to co-exist on defined terms, yet permit carrier-to-carrier arrangements which best reflect the needs of the subscribers and the particular carriers. Ultimately, the focus of the proceeding must be the public interest in permitting the carriers best situated to provide subscribers along the Gulf coast with the most reliable service at competitive rates to do so. Reliable service and competitive rates are at the heart of this proceeding.

II. Coverage Issues.

Contour Pullbacks Have Reduced Land-Based Coverage. Land-based carriers operating in markets along the Gulf have experienced difficulty in providing reliable service to their land-based subscribers. Due to the inability of land-based carriers to extend contours into the Gulf without the Gulf carrier's permission, land carriers (in the absence of agreement) are unable to produce adequate signal strength (see Calkins Study) at the land-based borders of their markets to effectively serve subscribers with hand held mobile units. The Bachow/Coastel v. GTE decision has forced a pull back of Service Area Boundary ("SAB") extensions and produced (and will continue to produce if permitted to stand) dead spots in land-based coverage as in, for example, the Mobile, Alabama market. Coastel has noted its claim that numerous illegal contour extensions continue to exist into the Gulf. Regardless of the routing of E-911 calls, there can be no E-911

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Second Notice of Proposed Rule Making in WT Docket No. 97-112 and CC Docket No. 90-6, FCC 97-110 (released April 16, 1997) at para. 2; Order in the Matter of Bachow/Coastel, L.L.C. v. GTE Wireless of the South, Inc., DA00-420 (Enforcement Bureau, released February 29, 2000.)

service without reliable signal and this constitutes an immediate and serious safety concern.

Disparate Rules Along A Common Border. The modification of contour signal strength from 39 dBu to 32 dBu effectively deprived land-based carriers of signal strength at precisely the time the market for mobiles was trending to low power hand held units typically operating at .6 watts or less at a height of approximately 6 feet. The court remand, which reestablished the geographically based CGSA of the Gulf carriers, created a disparate regulatory environment on either side of a common border. Gulf carriers were provided with a geographically defined CGSA (i.e. the entire Gulf) while land-carriers' CGSA remained defined by composite service contours. Territory was preserved for the Gulf carriers whether or not they provided service in a particular area, while land-based carriers were precluded from even de minimis overlaps in the Gulf (some of which naturally occurred with the change in contour signal strength to 32 dBu) without first obtaining the Gulf carrier's consent. Gulf carriers claim that network modifications like down-tilt antennas can essentially stop the land-based carrier's signal at the shoreline. This "solution" is an oversimplification, given that such antennas remain subject to the minimum radial distance computation from the Commission's propagation formula. The land-carrier would still have to show an SAB extension into the Gulf even with the use of a down-tilt antenna at a site close enough to the coast to provide service to a beachfront building. Consequently, use of these antennas would not guarantee a clean line of demarcation between the systems at the coastline.

Disparate Propagation Formulas Create Gaps In Service To Hand Held Mobile Units. Even where Gulf-based carriers produce a contour reaching the coastline, the signal strength at the contour boundary is only 28 dBu, a signal strength which does not provide service to hand-held mobiles, particularly where the Gulf-based site is over the radio horizon. An example of this physical principal of RF propagation is Coastel's VK-124 site off the Mobile, Alabama coast. Assuming that the facility operates as authorized (it does not – see below), it is beyond the radio horizon and incapable of providing service along the beachfront of Mobile to hand-held mobiles. Similarly, the land-based carriers remain precluded from extending an SAB contour needed to provide service to the coastline. The net effect is a gap in service.

There Really Are Terrain Obstructions on Land. Terrain obstructions, which attenuate RF energy, are present on land, but not in the Gulf. The Gulf-carriers have never acknowledged this obvious difference between the two sides of the Gulf border. For example, the Petrocom/U.S. Cellular proposal requires signal equalization based upon "line of sight," a methodology which ignores both the presence of terrain obstructions and the character of a particular market, while only in the best of circumstances providing a "50-50" chance that traffic will be captured by one system or the other. While the methodology may be fair in an unpopulated area along the coastline, it is an open invitation for the Gulf carriers

to capture land-based beachfront subscribers at the substantially higher Gulf-based roaming rates in markets with substantial beachfront/resort populations.

Gulf Sites Are Limited and They Move. The rigs upon which the Gulf-carriers base their facilities impose limitations on antenna height (generally below 200 feet) which, depending on the location of the site, inevitably translate to service limitations to hand-held units along the Coastline. Further, the rallying cry of the Gulf carriers in this proceeding has been that they should be afforded special consideration since the rigs move. But the movement of rigs can be viewed just as easily as a public interest detriment since the change in location may result in the deprivation of service to the area vacated by the rig. Yet, the Gulf carriers continue to insist that this area be preserved exclusively for them and be deprived of service until the rigs once again return. The record is devoid of information as to how often these rigs move and what occurs in the area vacated once the rig has been relocated.

Certain Gulf-Based Facilities Are Not Operating As Authorized. Although Coastel has represented to the Commission that its site at VK-124 operates at the parameters specified in its application and represented the coverage of the facility to the Commission in this proceeding on that basis, a survey of the site reveals that it is barely operating. Land-based carriers are nevertheless prohibited from remedying the deprivation of service.

III. Rates/Competitive Issues.

Intensive Competition on Land; Duopoly in Gulf. Land-based carriers face competition from numerous wireless carriers, while there are only two cellular carriers licensed to provide service from Gulf-based locations. There are no authorized PCS carriers operating from Gulf-based sites and land-based PCS carriers are permitted to propagate signal into the Gulf -- whether due to an authorized extension or simply because there is no Gulf-authorized carrier on the PCS frequencies to complain (other than microwave incumbents). This situation results in competitive advantages to land-based PCS carriers who can provide integrated service to subscribers both within and without the Gulf at competitive rates. Similarly, the situation provides no incentive for Gulf carriers to charge reasonable rates for traffic since there is no downward pressure on their rates through competition. Indeed, the record amply demonstrates that Gulf rates are significantly higher than land-based rates.

Market Implications. Land-carriers, who are in a competitive market, look at a subscriber roaming in an adjoining market as a minor expense under a typical roaming agreement between land-based carriers. Gulf carriers, however, due to the duopoly economics of the Gulf, view the same roamer as up to \$3.00 per minute (plus toll and set up charges) in income. Roaming agreements to provide service to hand held units (in certain circumstances) are made more difficult as roaming in the first instance cannot be achieved where service is lacking. The

Gulf carriers have the ability and the incentive to leverage Gulf-based rates as far onto land as possible, through attempts to capture land-based traffic or demands for unreasonable compensation for their consent to land-based SAB contour overlaps into the Gulf. (Coastel has demanded up to 67% of the revenue from cells with SAB extensions into the Gulf.) Land-based carriers are consequently forced to: 1) protect subscribers from Gulf-based rates through use of manual-only roaming on the Gulf systems; 2) absorb the Gulf carriers' excessive charges; or 3) pass them on to subscribers. The situation is harmful to the marketplace along the Gulf as it undermines competitiveness of land-based cellular licensees vis-à-vis other CMRS carriers who do not operate under similar limitations.

IV. The Joint Proposal.

The land-based carriers' joint proposal essentially provides for a "best server" scenario that affords the Gulf-based carriers numerous advantages. Gulf-based carriers would gain the flexibility to follow the migration of oil platforms and reactivate sites as they choose based only on compliance with the rules governing frequency coordination currently in effect. They would also have the opportunity for increased signal strength at the coastline so that they may continue to serve their subscribers further inland, and effectively "beat-back" the signal of the landbased carrier over the Gulf waters. (See Calkins study). Gulf-based carriers would also be permitted to use the land-based propagation formula as suggested in the Petrocom/ US Cellular proposal. Indeed, the joint proposal opens new opportunities for the Gulf-based carriers to activate additional sites closer to the coastline than the current rules provide. For example, despite its opposition to the use of the land-based formula for Gulf carriers, Coastel has pending an application for a site at MO113 (see FCC File No.0000113774) which uses the land-based formula. Under the current rules, the application is defective due to its use of the land-based propagation formula as noted in the petitions to deny the application. However, Coastel could activate this site under the land-based carriers' joint proposal.

Land-based carriers would be permitted to reestablish sufficient signal strength to provide reliable service to their subscribers, including E-911. Land-based carriers and their subscribers would also gain protection from the imposition of outrageous roaming fees charged by Gulf-based carriers. In short, under the Joint Proposal the carrier best situated to provide the best competitive service within the appropriate community of interest would be permitted to do so.

Coalition Written Ex Parte Presentation February 28, 2001 WT Docket No. 97-112 CC Docket No. 90-6

I. Introduction and FCC Objectives.

The Commission readily acknowledged in the NPRM that the situation surrounding the provision of service in and around the Gulf of Mexico is unique if for no other reason than it is the only cellular market that is comprised entirely of water. (NPRM at para 5). Land-based carriers have similarly stressed this point. (Coalition Ex Parte dated July 6, 2000¹). Even the Gulf carriers' technical consultants have acknowledged the uniqueness of the Gulf issues. (See Statement of Michael E. Hoffe appended to Coastel Ex Parte of July 31, 2000²). Conflict between land-based and Gulf-based carriers continues to exist over the provision of service as the Commission has acknowledged on several occasions (NPRM at para. 2; Bachow/Coastel, L.L.C. v. GTE Wireless of the South, Inc., DA00-420 (released February 29, 2000) affirmed on review, FCC 01-59 (released February 22, 2001) ("Bachow/Coastel v. GTE")

Resolution of the conflict and ensuring the provision of the best quality of service to the public are among the Commission's stated goals in this proceeding:

Our principal objectives in this proceeding are: (1) to establish a comprehensive regulatory scheme that will reduce conflict between water based and land-based carriers; (2) to provide regulatory flexibility to Gulf carriers because of the transitory nature of water-based sites; and (3) to award licenses to serve the well traveled Coastal areas to those carriers that value the spectrum most highly and

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² The statement also argues that these characteristics are similar to other landlocked market boundaries such as those of rivers and lakes. But these comments miss the point: whether by virtue of its size or the fact that it is the only market composed entirely of water, it is the only separately licensed water-based market and is the only cellular market in which the CGSA remains geographically defined. In this connection, it should be noted that the Commission wisely chose not to separately license the Great Lakes as their own service area. See <u>Third Report and Order and Memorandum Opinion and Order on Reconsideration in CC Docket No. 90-6</u>, 71 Rad. Reg. (P&F) 644 (1992) (the "Third R&O") at paras 11-12. Hence even if the propagation characteristics for land-locked markets were similar, the regulations governing operations in those markets are entirely different.

will maximize its use to provide the best quality of service to the public. (NPRM at para. 2)

Both land-based and Gulf-based carriers agree that the Commission must consider the court's decision in the <u>Petrocom</u> remand³ within the context of this proceeding. Land-based carriers, however, believe that consideration of the court's remand does not require the Commission to subjugate the larger public interest in contiguous reliable service at the lowest competitive rates to a solution that solely addresses the "unique plight" of the Gulf carriers. The court's criticism of the Commission went simply to its rationale and not the result. Petrocom remand 22 F.3rd at pages 1172-1173.

Land-based carriers also note that while the Commission apparently plans to satisfy it third objective by awarding spectrum in the proposed Coastal Zone by auction, there is no need to promote mutual exclusivity (the prerequisite for an auction under Section 309(i)(1) of the Act) in order to rectify the Gulf conflict. Indeed, pursuant to Section 309(i)(6)(E) the Commission remains under the obligation to use other means including engineering solutions and revision of service obligations to avoid mutual exclusivity in application and licensing proceedings.⁴ As noted earlier in this proceeding, the Commission has ample Section 303 authority to modify the boundaries of service areas in a rulemaking of general applicability without creating mutual exclusivity or the need for a Section 316 hearing. See, Further Comments of ALLTEL Corporation (May 15, 2000) at pages 17-19; Joint Reply Comments of ALLTEL Corporation, BellSouth, SBC Wireless and Telepak, Inc. (May 30, 2000) at pages 11-13; Letter dated March 18, 1998 from Philip E. Smith, Carol Tacker, and Andre J. Lachance to Magalie Roman Salas. In this regard, it bears noting that the caption in this proceeding continues to bear the original docket number (CC Docket No. 90-6) and the scope of this proceeding may revisit matters of record within that docket, including modifications to the regulation of the land/Gulf border.

II. The Nature of the Conflict.

The issues presented by the common border along the Gulf separating land-based systems from their water-based counterparts are unique and diverse. They differ markedly from the situation encountered by carriers operating in adjacent land-based

³ Petroleum Communications, Inc. v. FCC, 22 F.3d 1164 (D.C. Cir 1994) ("Petrcom remand").

⁴ It bears noting that the one thing upon which both Gulf-based carriers and land-based carriers agree is that the Commission's proposal to auction off areas within the Gulf as "unserved territory" would lead to increased conflict among a greater variety of parties. Any auction would inevitably open the door to mischief from third party applicants (proposing for example, locations on moored barges located in the Gulf) and others more interested in profiting from the licenses auctioned than to provide public service. Throughout the cellular licensing process, the Commission experienced substantial difficulties with a variety of selection processes. See, Cellular Licenses: A Gold Rush, RCR Wireless News (January 22, 2001) at page 16. There is no need for the Commission to risk similar problems here. Further, there is substantial question as to whether any separately authorized station operating in the Coastal Zone would be economically efficient or viable. Cellular is a mature industry and the existing licensees on both sides of the Gulf shore boundary are best suited to provide the service in the public interest by using the economies of their existing facilities.

markets. Despite the Gulf carriers' protestations to the contrary, there remain significant and undeniable differences between the provision of cellular service on land and over water.

A. RF Propagation Issues:

- (1) Terrain Obstructions. RF attenuates over land and land-based carriers must engineer for terrain obstructions such as buildings in order to provide reliable service both within and without the obstruction.
- (2) Signals "skip" over water and there are no terrain obstructions in the Gulf.
- (3) Land-based and Gulf-based carriers are licensed on the basis of vastly different propagation calculations [22.911(a)(1)] for land-based systems [22.911(a)(2)] for systems operating from sites in the Gulf.
- (4) Basis for the Gulf Propagation Formula. Gulf carriers sought and received a 28 dBu contour signal strength in the rulemaking. See Comments of Petroleum Communications, Inc. (January 16, 1992) and technical attachments thereto; Third R&O at paras 4-6. It is generally acknowledged that the Gulf model is actually useful in predicting the area in which the carrier can provide service to the mobile facilities specified in the model; i.e. an antenna mounted on a thirty-foot mast. This may be a typical installation for the commercial boats serving the oil and gas rigs in the Gulf. It is not the standard configuration for the hand-held mobile units typically in service on land (.6 watts at six feet or below in height). The water-based formula permits the Gulf carriers to claim an exceedingly large area within their coverage contour. This was a desirable result for the Gulf carriers given the prospect in the rule making at the time (and prior to the Petrocom remand) that the Gulf carriers' CGSA would, like their land-based counterparts, be limited to a CGSA comprised of their cells' composite service contours.
- (5) The basis for the land-based 32-dBu contour is a car phone with a permanent antenna operating in a rural environment. See <u>Calkins Study</u> appended to the Coalition's July 6, 2000 Ex Parte at page 2, citing <u>Second Report and Order in CC Docket No. 90-6</u>, 7 FCC Rcd 2449 (1992) (Attachment 1 hereto.) However, the vast majority of land mobiles in use today are hand held units operating with .6 watts or less in power at approximately 6 feet or less above ground. The lower power and operating height serve to limit the distance from which the mobile unit may communicate with a distant cell site by virtue of terrain obstructions, power limitations or the radio horizon. Further, the need for a low powered hand held mobile unit to "talk-back" generally requires a cell to be located within relatively close proximity about 3.0 miles under

current industry practices for land-based systems.

- (6) In the wake of the <u>Petrocom remand</u>, land-based carriers have their CGSA defined by the composite 32-dBu service contours of their system. The Gulf carriers' protected CGSA remains geographically based as the entire Gulf, whether or not a service contour is present.
- (7) There is a substantial aggregation of subscribers at the market boundary; i.e. the beachfront in many areas around the Gulf coast which serve as resort locations. Hence there are substantial numbers of subscribers that are affected by any lack of service quality along the Gulf market boundary. See, for example, Alabama Gulf Coast Area Chamber of Commerce Web Site, www.alagulfcoastchamber.com and Attachment 2 hereto.

(8) Implications.

- (a) Patently unfair situation: old CGSA rules apply to only one side (the Gulf side) of a common border. Land-based carriers' CGSA is service contour based, while the Gulf carriers' protected CGSA is geographically protected whether they provide service (and in particular, service to hand held mobiles) or have a service contour within the area or not.
- (b) In the wake of the Petrocom remand, the Gulf carriers' CGSA was restored (pending further FCC action), while the land-based carriers suffered a reduction in signal strength (from 39 dBu to 32 dBu). This signal strength reduction at the contour occurred at precisely the time the market for portables was trending toward low power hand-held mobiles; i.e. more sites and greater power were required for land-based licensees.
- (c) Even where Gulf carriers show contour coverage reaching the coastline boundary, service to hand-held mobile units may be compromised. The signal at the boundary of the Gulf carriers' contour is approx. 28 dBu, a signal strength that is wholly inadequate to provide building penetration to serve mobile units indoors. (See <u>Calkins Study</u>) Further, depending on the distance from shore of the serving Gulf-based site, the ability to serve hand-held portables in coastal areas is severely limited by the radio horizon. A distant Gulf site may be able to see a 30-foot high antenna at the margins of its 28-dBu contour, but due to the radio horizon, it can't see a hand held mobile unit

⁵ The Gulf carriers' signal, however, may be sufficient to capture traffic in the open and on the beach at the borderline, particularly where the land-based carrier's cells are shielded from the beach by buildings or other terrain obstructions.

operating at six feet above ground. This showing has been previously made to the Commission by GTE. (See Technical Exhibit and attachments appended hereto as Attachment 3 hereto.)

- (d) Service to hand-held mobile units on land has been compromised and reliable service in many coastal areas cannot be provided given the combination of: 1) lower contour signal strength for land-based carriers based upon the conversion to the 32 dBu standard; 2) the inability of Gulf-based sites to serve hand-held mobiles from sites located beyond the radio horizon; and 3) the inability of a land-based carrier to extend contours into the Gulf without the consent of the Gulf carrier, even on a de minimis basis.
- (e) Example: In areas of the Gulf such as Mobile and the Florida Coast, there is little or no service on the B side frequencies to the beach front from either the land-based or Gulf-based carrier. The Gulf carrier cannot reach handheld mobile units from its VK-124 site and, due to the irregular shape of the coastline and the absence of contour overlaps, the land-based 32 dBu contours in the market do not provide adequate service, particularly where buildings and other terrain obstructions attenuate the land-based carrier's signal. (See Supplemental Comments of GTE Service Corporation (May 15, 2000) at Exhibit A; GTE Ex Parte Letter (May 2, 2000); See also various complaints appended hereto as Attachment 4.)
- (f) Example: There are no oil rigs off the coast of Florida, yet under the current rules, the Gulf carriers continue to exercise dominion over the waters of the Florida Gulf. In the absence of extraordinary relief, a Gulf carrier may prevent land carriers from extending service contours despite the fact the Gulf carriers have no realistic prospect of providing service in the area. Land-based carriers have been forced to seek STAs (and not without vehement opposition) in order to extend their 32 dBu contours into the Gulf to achieve the signal strength required to provide adequate service on land to hand held portables. (See for example, Public Notice, Wireless Telecommunications Bureau Grants Special Temporary Authority to ALLTEL Corporation Allowing Improvements in Cellular Coverage in Coastal Florida, DA99-2073 (Released October 4, 1999) ("ALLTEL STA"). To Petrocom's credit, it

⁶ The ALLTEL STA was granted under call signs WPOK990, WPOK991 and WPOK992. See also the various oppositions and petitions for reconsideration of the grant of the STA.

is prepared to surrender the Florida Gulf. There is not, however, unanimity between the two Gulf carriers even on this issue.

B. Economic/Competitive Issues.

- (1) Existence of Competition in Land-Based Markets. Land-based carriers face competition from numerous PCS and ESMR carriers, while only two cellular carriers are licensed to serve the Gulf. The Gulf carriers and a number of PCS carriers argue that PCS service should not be authorized in the Gulf. Further, while cellular carriers' markets end at the coastline, PCS carriers claim that their markets extend out into the Gulf. While the existence and extent of the PCS market extension into the Gulf is a matter under consideration in this rule making (NPRM at paras 58-60), it is clear that: 1) there is no authorized PCS carrier operating from Gulf-based sites and 2) land-based PCS carriers are permitted to propagate signal into the Gulf, whether due to an authorized extension or simply because there are no Gulf-authorized carrier on the PCS frequencies to complain (other than microwave incumbents).
- (2) Rates. Rates in the Gulf are vastly higher than land-based rates as amply demonstrated on the face of the record. See, NPRM at para 34; Declaration of Tommie Morgan, dated May 26, 2000 as appended to the Further Reply Comments of MobileTel, Inc. (May 30, 2000); Declaration of Gary Reifel dated May 30, 2000 as appended to the Further Reply Comments of AT&T Wireless (May 30, 2000) sindicating numerous complaints about the roaming charges in the Gulf and that AT&T has been forced to raise its "One-Rate" plan for Gulf roaming to compensate for the charges]; Supplemental Comments of GTE (May 15, 2000) at fn. 5 [indicating that roaming rates are \$3.00/minute, plus fee of \$3.00/day and toll at \$0.79/minute]. Rates are sensitive competitive matters and differ widely based upon carrier to carrier relations (if any) and whether manual roaming is employed. The Gulf carriers, who essentially operate in a duopoly market, have provided no justification for their charges. Indeed, rather than address the issue in substance, Coastel has threatened to take action against GTE for breach of the confidentiality provisions of an intercarrier roaming agreement and invited FCC action under Sections 201 and 202 of the Act. 8 See, Coastal Reply Comments (May 30,

⁷ Where manual roaming is employed between Gulf-based and land-based carriers, there are instances where the land-based carrier charges Gulf-based subscribers a "reflexive" rate equal to that charged by the Gulf carrier to land-based subscribers. In such situations, there is typically a large unbalance of traffic in the Gulf-carrier's favor.

⁸ The Commission should consider taking Coastel up on its challenge under its broad Section 303 powers to investigate rates, inasmuch as the duopoly structure of the market has not provided sufficient competition to protect subscribers from unfair rates.

- 2000) at page 12. The Commission in the NPRM correctly listed as a consideration whether boat traffic would be required to incur higher roaming rates from carriers licensed to provide service to the Gulf. (NPRM at Para 34.)
- (3) The Economic Conflict. From the land-carriers perspective, a subscriber roaming in an adjoining market licensed to another carrier is an expense to be determined under the prevailing land-based roaming rate (even if the subscriber is in the waters of the Gulf.) These rates may vary under a number of factors, but are generally below 40 cents/minute and can be as little as 5 to 10 cents/minute under typical roaming agreement between land-based carriers. Continued downward pressure has been exerted on land-based roaming rates given the increased competition among numerous land-based providers and the emergence of national wireless carriers. Gulf carriers. however, due to the more difficult economics of the Gulf, view the same roamer from the adjoining market as up to \$3.00 per minute (plus toll and set up charges) in income. Simply put, the gap in rates is too great to result in a resolution that serves both parties reasonable economic interests. Given that the current rules preclude the provision of adequate service to land-based subscribers in the absence of a contour overlap (to which the Gulf carriers must consent) and the fact that there is no facilities-based competition from Gulf-based PCS providers to place downward pressure on Gulf rates, the Gulf carriers have the ability and the incentive to leverage Gulf -based rates as far onto land as possible, whether through overt attempts to capture land-based traffic or through demanding excessive compensation for consent to contour overlaps.9
- (4) Implications. PCS carriers may provide adequate service in coastal areas at a unified rate reflecting the intensive land-based competition in the CMRS market. Land-based cellular carriers are forced to: 1) pay excessive compensation for contour overlaps; 2) shut out automatic Gulf-based roaming to shield subscribers from excessive rates; or 3) otherwise "eat" a large portion of the excessive rates charged by the Gulf carriers in order to remain competitive and prevent subscriber churn.

III. The Rule Must Change.

<u>Enforcement Bureau Decision</u>. The NPRM was issued by WTB prior to the creation of a separate Enforcement Bureau. While the WTB tentatively concluded in the NPRM that de minimis overlaps were, and

⁹ The fact that PCS carriers propagate into the Gulf may provide some measure of alternative competition for coastal areas, but cellular roaming on land-based PCS systems requires the expense of replacing existing cellular handsets with tri-mode phones. Roaming on PCS systems still does nothing for those roaming subscribers from distant markets (a typical situation in resort areas) using cellular only handsets.

would be, permissible in the Gulf (NPRM at para 45), the Enforcement Bureau has created substantial doubt as to the permissibility of either grandfathered contours (resulting from the change from 39 to 32 dBu signal strength) or de minimis contour overlaps. (See, Bachow/Coastel v. GTE.) The recently upheld (although not final) decision has far reaching import for both the Commission and the carriers along the Gulf inasmuch as the decision preserves the right of the Gulf carriers to force any landbased contour extension out of the geographically defined Gulf CGSA. Retention of the current rules (as sought by the Gulf carriers) would continue to provide them with the power and incentive to leverage exclusive dominion over the geographic boundaries of the Gulf and extract payments or other forms of unreasonable compensation for contour overlaps from the land-based markets adjoining the Gulf, whether the overlap is claimed to be "grandfathered" (i.e. resulting from the change from 39 dBu to 32 dBu) or is in an area beyond the service contour or service capability of a Gulf-based facility.

The rules must change to avoid the flood of litigation over forced contour pullbacks and the resulting public service complaints when land-based service is further compromised. Indeed, Coastel has presaged this eventuality if the rules are not modified. On the one hand, it points to various land-based contour extensions into the Gulf to make its argument that service (at least in some variety) is provided to coastal areas. See, Coastel Ex Parte (June 2, 2000), [arguing that STAs and Interim Authority may be obtained to rectify service deficiencies -- even though Coastel has fought such requests off the coast of Florida where it has no prospect of providing service]; Comments of Coastel (May 15, 2000) at 7; See Exhibit Four appended to Reply Comments of Coastel (May 30, 2000). 10 Yet, on the other hand, it alleges that many of these contour extensions are illegal under the Bachow/Coastel v. GTE case. See Coastel Comments (May 15, 2000) at pages 6-7; Coastel Reply Comments (May 30, 2000) at 5. If the rules are not changed, licensees of land-based systems should expect demand letters to remove their contour extensions into the Gulf immediately upon the effective date of the results in the instant rulemaking. The Commission will be confronted with yet another round of complaints over degraded service, and STAs seeking to restore service. This is no idle threat from Coastel, who has litigated over Gulf issues at every turn in the past (See, for example, the ALLTEL STA matter.)

IV. Gulf Carriers Ex Parte of January 8, 2001

¹⁰ The same map appears in Exhibit Four to the Coastel Reply Comments, as was submitted in the June 2, 2000 Ex Parte. The map purports to show coverage from land-based sites based upon 28 dBu contours, not the current 32 dBu contour standard in the Commission's rules. Hence the contour extensions from land-based facilities are grossly exaggerated and the map is essentially a useless piece of propaganda. Although marginally stronger than 28 dBu, a 32-dBu signal is still wholly inadequate to provide service to hand-held mobile units under the <u>Calkins Study</u>.

(A) Petrocom Presentation.

Coverage. Petrocom claims a fully built out infrastructure in and along the Western portion of the Gulf and seamless coverage based upon agreements with land-based carriers governing overlaps and land-based sites.

To its credit, Petrocom is prepared to cede a ten-mile zone off the Florida coast inasmuch as there are no platforms in the area from which it might provide service. However, the Petrocom map does not show any platforms east of the Mobile, Alabama area, leaving portions of the Alabama coastline unserved as well from the Gulf side of the border. The contour coverage shown (aside from the land-based sites) is based presumably upon the water-based propagation formula and may not provide the signal strength required for service to hand-held portable units from Gulf-based sites located beyond the radio horizon.

The Petrocom showing does not address the <u>Calkins Study</u> and the key point that the land-carriers have stressed in this proceeding: the need for adequate signal strength to serve beachfront buildings and handheld mobiles. The <u>Calkins Study</u> indicates that under the current rules, adequate signal strength to mobile handsets cannot be achieved at the market borders without SAB extensions into the Gulf. Hence, the coverage deficiencies inherent in the Commission's current rules, absent an agreement between carriers, have been well documented. Additional coverage deficiencies will undoubtedly arise from forced contour pull backs of "grandfathered contours" if the <u>Bachow/Coastal v. GTE</u> precedent is permitted to stand unchanged by the rule making.

Solutions generally proffered by the Gulf carriers (such as microcells) are expensive, inefficient and do not acknowledge the default values in the Commission's contour formula. Indeed, even if a microcell was constructed close enough to the beach to be of use, its southern radial would constitute an impermissible extension into the Gulf CGSA due to the default values in the FCC contour model. Hence, even microcells would require a SAB overlap and the Gulf carriers' consent. Similar issues confront down-tilt antennas.

Assuming for the moment that Petrocom currently provides seamless coverage along the Western portion of the Gulf, it has failed to acknowledge any effect on coverage resulting from that particular characteristic of Gulf-based systems which has become the Gulf carrier's rallying cry in this proceeding: **platforms move**. The movement of platforms – and how service is maintained in the area vacated by the migrating site – is as much a public service detriment as a "unique plight" requiring special dispensation. As for Petrocom's land-based sites, nothing in the land-based carrier's Joint Proposal prohibits these types of agreements, nor does it abrogate any existing agreement. Land-based carriers have no objection if the terms of these agreements are explicitly grandfathered under any new rules adopted.

But there are two frequency blocks licensed in the Gulf, and Petrocom's representation as to its coverage on the A side has no bearing on the actual coverage provided by the B side carrier, in the absence of some intercarrier agreement between the two Gulf licensees. The record in this proceeding, and in other proceedings before the Commission (of which the staff may take administrative notice) document poor coverage along the Florida and Alabama coast. See ALLTEL Request for STA; Bachow/Coastel v. GTE, FCC File No.WB/ENF-F-98-005; Supplemental Comments of GTE (May 15, 2000). The filings made by the B-side Gulf carrier, which purport to demonstrate contiguous coverage along the Gulf, are essentially of no value. For example, the coverage maps supplied in Coastel's June 2, 2000 Ex Parte presentation are simply theoretical contour plots based upon omni-directional antenna systems without regard to the antenna system or other parameters actually in operation. This rather major caveat is noted directly on the map. Additionally, the accuracy of the representations is called directly into question by the real world examination of the facility at VK-124, the results of which are attached hereto in the Technical Exhibit. While the contour depicted on the map is omni-directional and the contour extends virtually to the coastline, its actual operations provides coverage that departs drastically from that represented to the Commission either in the Ex Parte, or in the original application for the activation of this facility. (See Technical Exhibit, Attachment 3 hereto.) Yet, due to the geographic CGSA definition of the Gulf, the B side Gulf carrier may operate this site using minimal facilities with apparent impunity. On this basis, a Gulf carrier may order even minimal SAB extensions to be pulled back, safe in the knowledge that its CGSA is protected despite the degradation of public service in both the Gulf and Mobile markets.

(B) The Dennis Study.

The Dennis Study, which the Gulf carriers purport to be both definitive on service issues and indicative of the situation Gulf-wide, is neither. Real world data, while at times helpful, is limited by the specific variables and parameters of the test. Consequently, real world data never accounts for every situation which may arise in a particular market, or in the case of the Gulf, along the entire market border. The Dennis Study includes references to data from three different time periods. First, there is the data gathered during preparation of the initial comments in response to the <u>Further Notice of Proposed Rulemaking</u> in CC Docket No. 90-6 from 1991, although there is no indication of what this data demonstrated or the manner in which it was considered in the report. (Appended as Attachment 3 to the Gulf Carriers January 8, 2001 Ex Parte.)

The Flagship Hotel test was conducted in 1992 without permission from GTE, the Galveston licensee, and was quickly shut down, due to the capture of land-based subscribers. It was not a study intended to demonstrate adequate service, but

rather to demonstrate the viability of a land-based site for the Gulf system. See Reply Comments of Bachow/Coastel, L.L.C (August 4,1997) at Engineering Statement appended thereto. Hence, the test was intended to show GTE as the best server. Contrary to the bald assertion, however, that GTE was the best server regardless of how far one was off shore, the graph at Exhibit 1 shows the Coastel signal to be as strong or stronger within the first two miles. This result is said to be due to the fact that the height of the GTE site was 200 feet; a height neither available at the Flagship hotel nor generally available on an offshore platform. But even if true and GTE was operating within the rules in place in 1992 (prior to the Petrocom remand), a cell at the Hotel operating on the minimal parameters specified, would have been a useless expenditure of capital by a Gulf carrier, as GTE was purported to be the best server. If, however, the status of the GTE system or SAB overlaps have changed from that which existed in 1992 (or are rendered potentially illegal and subject to removal on the basis of Bachow/Coastel, v. GTE) the test means little as a "real world demonstration" inasmuch as it no longer reflects the real world. Indeed, any relevance as to GTE being the best server simply invites the question "as compared to what?" The test and the data are simply stale.

1998 Test Data. B side. The data is generally suspect in that it appears to attribute the presence of signal on the same channel at 5 km (-78dBm) to the reuse of the channel on land from a site at a distance of 150km. Further, and as noted in the study, the drive route for the test, is largely (with the exception of Galveston) along a highway and not the beachfront. For much of the route, there are contiguous buildings between the road and the beach that effectively shields the test equipment from Gulf originated signals. Given the shielding effect and the difference in land vs. Gulf contour signal strengths provided for under the rules, the test results are unremarkable. What the test results do show is that for virtually all of the test drive, the land-based carrier lacks the sufficient signal strength cited under the <u>Calkins Study</u> for the provision of reliable service to hand-held portable mobile units and building penetration.

Similarly, as to the testing done in the Galveston area, the results of the tests are to be expected for reasons unstated in the study. It is understood that the B side licensee in the Galveston market had (and may continue to have) a number of SAB overlaps into the Gulf from the Galveston market. Some of these overlaps, if not all, have either been agreed to on a reciprocal basis or otherwise been the recipient of the Block B Gulf licensee's acquiescence. The absence of a discussion of the status of the facilities subject to the test is critical; in view of the agreed to overlaps, it finds what is to be fully expected given the circumstances of that market. It is by no means indicative of the remainder of the Gulf where SAB overlaps do not exist, nor does it establish the presence of adequate signal strength for hand-held mobiles in Galveston under the Calkins Study. Again, the current status of any land-based SAB extensions into the Gulf and whether they continue to exist are otherwise threatened by the Bachow/Coastel v. GTE precedent.

Further, the Galveston drive test data is to some degree refuted by GTE's submission of a Galveston subscriber bill showing roughly \$700 dollars in roaming fees from a Gulf carrier. The bill is evidence both of Gulf-based capture on land and the economic hardship Gulf-based rates impose on land-based carriers and their subscribers. Indeed, the bill is also a poignant reminder that, even where reached, agreements between Gulf-based and land-based licensees under the skewed dynamics of the current rules can still be a bad deal for the consumer. Indeed, Coastel notes its agreement with past practice in negotiations where the land-based licensee is required to execute contour extension agreements before discussions begin on roaming rates. See Reply Comments of Bachow/Coastel., L.L.C. (May 30, 2000) at page 12-13. A land-based licensee would be entirely reasonable in attempting to pin down a roaming rate, before agreeing to any contour overlap from the Gulf which might expose land-based subscribers to the vastly more expensive Gulf roaming rates.

A Side: The A side data is generally immaterial inasmuch as Petrocom has successfully negotiated a limited number of agreements governing contour overlap. Further, on the face of the study and the best of our knowledge, the data has never been fully reduced and submitted to the Commission

(C) The PetroCom/US Cellular Joint Proposal Is Fatally Flawed.

The proposal has never been endorsed by both Gulf carriers.

RF does not stop on a dime and cannot be equalized with mathematical precision to respect geographic boundaries. Proposals to equalize signal strengths ultimately mean only that there is a 50-50 chance of the traffic being captured by one carrier or the other. Given the vastly more expensive rates charged by Gulf-based carriers, land-based carriers cannot remain competitive, and subscribers are harmed where land-based traffic is captured by Gulf-based carriers. In this connection, although superficially reasonable, land-carriers (with the exception of US Cellular) have not supported the Petrocom proposal because it requires equalization of signal (i.e. 50-50 capture at the coastline) on the basis of line of sight. Consequently, the proposal does not take the significant reality of buildings and other land-based obstructions into consideration. The proposal is a recipe for the capture of beachfront land-based traffic by the Gulf carriers.

The proposal does nothing to address the land-based carriers' need for adequate signal strength and may in fact require that land-based carriers further reduce signal strength. For example, under the proposal, the public must wait five years before a land carrier could unilaterally serve areas vacated by the movement of a platform, but even then the territory would be subject to reclamation right by the Gulf carrier. Upon reclamation, the Gulf carrier could require a land carrier to equalize signal strength by

reducing power to a level as low as -100dB, far below the signal strength required for service under the <u>Calkins Study</u>. In short, the proposal is overly complex, dramatically skewed toward the Gulf carriers, and exposes land-based subscribers to excessive Gulf-based rates.

Although advocating that Gulf carriers should have a 50-50 capture rate at the border, the Petrocom proposal does nothing to equalize roaming rates for those on land captured by the Gulf-based system.

Equal signal strength goes to the issue of capture and does equate with the adequate signal strength required to serve hand-held units or provide building penetration.

See generally, <u>Supplemental Comments of GTE Services Corporation</u> (May 15, 2000) pages 14-20.

(D) SERVICE DEFFIENCIES; THE CALKINS STUDY.

Attachment 4 of the January 10th Ex Parte filing is simple hysterics. It ignores major components of the land-based carriers' joint proposal and the underlying (and largely undisputed) theory of the <u>Calkins Study</u>. For example, it ignores that the Gulf-based carriers would be permitted to use a 32 dBu contour signal strength at the shoreline (an element of the Petrocom proposal) using the land-based propagation model (also an element of the Petrocom proposal.) The exhibit does acknowledge that the theory behind the joint proposal is essentially a best server profile, but this is entirely reasonable, as shifting best server situations are common, particularly for terrain reasons. Again, RF cannot, as a matter of basic physics, be made to stop on a dime or respect a rigid geographic border.

The Attachment 4 showing respecting a purported doubling in power is based on the location of a cell site some miles away from the coastline. Even with the power increase and the minimal contour extension, the signal strength at the coastline would only be slightly higher and certainly not high enough to provide sufficient signal strength to a hand-held mobiles or talkback from the mobile to the cell site.

The claim that the neutral zone is a recipe for chaos is a red herring and does not address in any measure the technical showings of the <u>Calkins Study</u> demonstrating that land-based and Gulf-based carriers will typically be the best server in their respective markets. This is particularly so inasmuch as the increased signal strength and the new potential for sites closer to land afforded to Gulf carriers under the Joint Proposal essentially beats back the land-carriers' signal, particularly in the proposed Exclusive Zone. See <u>Calkins Study at pages 5-6 and Appendix B thereto.</u>

(E) COASTEL Presentation.

Modifications to the Land-based carrier's proposal. Coastel lambastes the land-based carriers for attempting to move their proposal toward a compromise.

The proposal is critiqued as not being neutral and not providing anything to the Gulf-based carriers. Coastel ignores the fact that the increased signal strength provided to Gulf carriers at the coastline (32dBu) under the Joint Proposal does provide a significant and further overlap of land-based territory when adjusted for the water-based contour signal strength. For example, See <u>ALLTEL Petition to Deny</u> (Coastel's Application for a new site for Station KNKA412 at MO113) FCC File No. 0000113774 and Exhibits thereto.(Administrative Notice Requested.)

Frequency coordination. Again, the proposal, which is said to be unworkable, is currently required under the Commission's current rules governing frequency coordination for sites within 75 miles of each other. See, Section 22.907 of the rules.

Use of the land-based formula. Coastel argues that the use of the land-based formula for facilities operating in the Gulf is "nonsensical". THIS IS PRECISELY WHAT COASTEL PROPOSES IN ITS CONSTRUCTION PERMIT APPLICATION FOR THE MO113 SITE. (See FCC File No. 0000113774). If the Joint Proposal was adopted, Coastel could activate this site. Apparently, Petrocom and U.S. Cellular are nonsensical as well, because use of the land-based formula is a prominent feature of their proposal as well.

Coastel yet again refuses to acknowledge either the absence of coverage along the Florida coast or the deprivation of service it has caused to the resort areas along the coastline and barrier islands of the Mobile, Alabama area.

Coastel argues that the Joint Proposal would preclude activation of additional Gulf sites. This is nonsense – all Coastel must do is coordinate frequency use in good faith. The Gulf carriers would not be frozen out, and on the basis of the Calkins Study, they would become best server in the area reclaimed upon activation (or reactivation) of the site. Indeed, given the adoption of the land-based propagation formula, the Joint Proposal presents Gulf carriers with opportunities for new sites that are precluded under the rules in effect today. (See above.)

Coastel argues that there are no E-911 Problems. E-911 service requires the provision of reliable signal strength. There can be no E-911 service where there is no reliable signal. (See complaints from Mobile, Alabama market.)

Coastel argues that the Joint Proposal does not provide any benefit to Gulf carriers. On the contrary it provides: (1) the ability to activate new locations currently precluded by the rules; (2) flexibility to follow migrating platforms while preserving the ability to return to vacated areas at a later time; (3) stronger signal strength; and (4) relief from the "move it you lose it" threat even along the Florida coastline. Indeed, the Joint Proposal provides more flexibility off the Florida coast than the Petrocom proposal.

Coastel's real world data is suspect, stale and relevant only to a limited portion of the Gulf (Texas). (See discussion of the Dennis Study, above.)

Coastel argues that the Commission's rule making is based on circumstances which no longer exist. Signal strength deficiencies do exist both in theory and in real world situations. The land carriers are effectively deprived of the ability to obtain adequate signal strength and much of the Alabama and Florida coastlines are not served by Gulf-based carriers. This is shown on their own maps, which at least with respect to the B side Gulf carrier, may not accurately depict the actual status of either their facilities or their coverage. (See Technical Exhibit.)

If the current rules are kept in place despite their deficiencies, the Gulf carriers will institute massive litigation to force all SAB extensions into the Gulf (even those subject to a legitimate "grandfather" exception) to be pulled back without regard to whether the Gulf carrier can or will provide service to the area. Land-carriers may be forced to pay excessive consideration for the ability to extend SAB contours even minimally into the Gulf.

IV. Areas of General Agreement.

As to the Florida coast where there are neither any platforms nor immediate prospect of Gulf service, the Land-based carriers and Petrocom are in agreement. Indeed the land-based carriers modified their proposal to reduce the proposed Coastal Zone from 12 miles (the FCC's proposal) to 10 miles to comport with the Petrocom proposal for the Florida coast. Indeed, with respect to the Florida coast, the joint proposal is more favorable to Gulf carriers because it does not preclude operations off the Florida coast in the future.

Permitting a 32 dBu contour strength at the coastline for Gulf carriers is another point of agreement between the Petrocom proposal and the joint proposal. While the Gulf carriers complain that they do not get a chance to overlap onto land, in fact they do by virtue of the increased signal strength at the border (i.e. if calculated on the basis of a 28 dBu contour, the signal strength of a 32 dBu contour would go far inland.)

Both Gulf-based and land-based carriers believe that auctions are unnecessary in the Gulf and will increase, not lessen, conflict among carriers.

V. A RESTATEMENT OF THE JOINT PROPOSAL.

A "neutral zone" is created in the Gulf beginning at the shoreline and extending out ten miles into the Gulf.

An "exclusive zone" would be created from the ten mile borderline of the neutral zone out to encompass the remainder of the Gulf waters. The exclusive zone would be preserved for Gulf carriers only and their facilities would be subject to protection from interference and unauthorized capture as currently provided in the Commission's rules.

Land-based carriers could, upon permissive notification to the Commission, place a 32 dBu SAB extension calculated on the basis of the land-based propagation formula (22.911(a)(1)) up to the ten mile borderline between the neutral zone and the exclusive zone. Gulf-based carriers would be permitted to place a 32 dBu contour calculated under 22.911(a)(1) up to the shoreline. While land-based carriers would be limited to facilities located on land, Gulf-based carriers could freely activate and reactivate facilities within both the exclusive zone and the neutral zone based upon frequency coordination and compliance with the Commission's rules.

The land-based carrier's protected CGSA would begin at the coastline. The Gulf carrier's protected CGSA would begin at the border of the exclusive zone. A "best server" profile would be created within the neutral zone in which the carrier best situated at the time to service the traffic would do so.

Permissive notifications would be filed with the Commission for any facilities with SAB overlaps into the neutral zone, whether from land or from the exclusive zone.

Proposed rules demonstrating the simplicity with which the Commission's current rules may be amended to implement the ALLTEL proposal are appended hereto as Attachment 5.